

Aviation Investigation Final Report

Location:	Evans, Georgia	Accident Number:	MIA02LA025
Date & Time:	November 20, 2001, 10:30 Local	Registration:	N6688P
Aircraft:	Piper PA-24-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal	-	
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Analysis

The pilot stated that about 40 minutes into the flight, at an altitude of about 3,000 feet, all of a sudden, and without warning, the engine ceased operating. He said he performed the emergency procedures, but was unable to get the engine operating again, and he affected a forced landing at the edge of a wooded area. A witness stated that he was in a parking lot, and he saw the airplane, and heard it "cutting on and off", and "waving" back and forth, before it crashed. A detective with the Columbia County Sheriff's Office stated that the pilot told him that he ran out of fuel and tried to land in an open field, but ended up crashing on the bank of a private pond. According to the FAA inspector who responded to the accident scene, the accident airplane's right wing had been destroyed, along with its associated fuel tank as a result of the impact, but the left wing had remained intact. The inspector further stated that the fuel tank in the left wing was found to be nearly full of fuel, and examination of fuel lines from the gascolator to the fuel pump, and from the fuel pump to the carburetor did not reveal any evidence of fuel. The NTSB conducted an operational test of the engine at Atlanta Air Salvage, Griffin, Georgia, and it functioned, exhibiting no evidence of preaccident failure or malfunction. In addition, a detailed examination and test of the airplane's carburetor revealed no anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel management and failure switch to the other fuel tank which had fuel available prior to the engine ceasing to operate, which resulted in fuel starvation and damage to the airplane during an off-airport landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FUEL MANAGEMENT - IMPROPER - PILOT IN COMMAND 2. FLUID,FUEL - STARVATION

Occurrence #2: FORCED LANDING Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
3. TERRAIN CONDITION - GROUND

Factual Information

On November 20, 2001, about 1030 eastern standard time, a Piper PA-24-250, N6688P, registered to and operated by, a private individual, as a Title 14 CFR Part 91 personal flight, crashed in a neighborhood in Evans, Georgia. Visual meteorological conditions prevailed, and no flight plan was filed. The private-rated pilot received serious injuries, and the aircraft incurred substantial damage. The flight originated from Anderson, South Carolina, the same day, about 0930.

The pilot stated that about 40 minutes into the flight, while the airplane was at an altitude of about 3,000 feet, all of a sudden, and without warning, the engine ceased operating. He said he performed the emergency procedures, but was unable to get the engine operating again. At an altitude of 2,200 feet, he said it became necessary to select an emergency landing spot, so he concentrated on flying the airplane, and affected a forced landing at the edge of a wooded area.

A witness stated that he was in a parking lot, and he saw the airplane, and heard it "cutting on and off", and "waving back and forth", before it crashed. In addition, a detective with the Columbia County Sheriff's Office stated that when he responded to the scene, emergency personnel were helping the pilot out of the accident airplane, and the pilot stated to him that he ran out of fuel and tried to land in an open field, but ended up crashing on the bank of a private pond.

Rescue personnel who responded to the accident stated that they found no evidence of fuel spillage at the accident scene, and added that when they first responded they heard a "humming" sound coming from the airplane wreckage, so a firefighter pulled a 50-Ampere circuit breaker and the "humming" sound ceased. In addition, rescue personnel said they also turned the airplane's "key switch" to the off position, and moved the fuel selector control from the "left" position to the "off" position.

An FAA inspector who responded to the accident scene said that the accident airplane's right wing had been destroyed as a result of the impact, but the left wing had remained intact, and that its associated fuel tank was found to be nearly full of fuel. The inspector further stated that there was no evidence of any fuel spillage in the area of the right fuel tank which had been destroyed. Examination of the engine, to include the fuel lines from the gascolator to the fuel pump, and from the fuel pump to the carburetor did not reveal any evidence of fuel.

The NTSB conducted an operational test of the engine at Atlanta Air Salvage, Griffin, Georgia, and it functioned, exhibiting no evidence of preaccident failure or malfunction. In addition, a detailed examination and test of the airplane's carburetor revealed no anomalies.

Pilot Information

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Certificate:	Private	Age:	50,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	January 26, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 25, 2002
Flight Time:	350 hours (Total, all aircraft), 272 hours (Total, this make and model), 308 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft and Owner/Op			
Aircraft Make:	Piper	Registration:	N6688P
Model/Series:	PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1329
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 5, 2001 100 hour	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3660 Hrs as of last inspection	Engine Manufacturer:	Avco Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540-A1A5
Registered Owner:	John J. Davis	Rated Power:	250 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AGS,145 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	09:53 Local	Direction from Accident Site:	345°
Lowest Cloud Condition:	Few / 8500 ft AGL	Visibility	9 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	0 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	16°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anderson, SC (AND)	Type of Flight Plan Filed:	None
Destination:	Agusta, GA (AGS)	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	33.371944,-82

Administrative Information

Investigator In Charge (IIC):	Lovell, John	
Additional Participating Persons:	Tommy Bush; FAA FSDO; College Park, GA	
Original Publish Date:	April 1, 2003	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=53847	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.